

ECONOMIC COMMENTARY

Alberta's Oil and Gas Exports in 2013

March 26, 2014

Highlights:

International exports of Alberta oil and gas rose 9.9% in 2013, mainly as a result of higher natural gas prices and surging oil export volumes, especially from the oil sands. Crude oil by rail exports have surged in recent years and accounted for 5.2% of total oil export volumes in 2013.

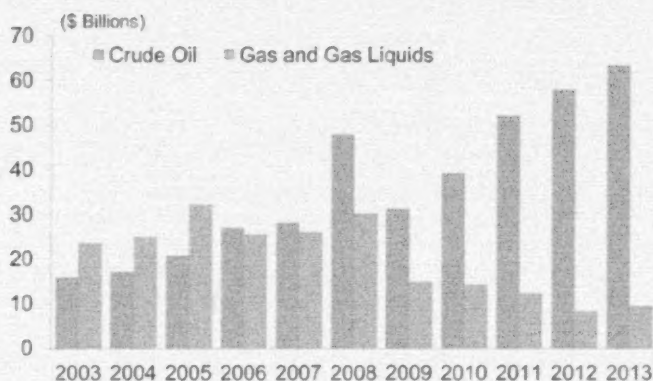
Overview

International exports of crude oil and natural gas and gas liquids is one of Alberta's largest economic drivers, accounting for more than 20% of Alberta's Gross Domestic Product (GDP). In 2013, Alberta's oil and gas exports totaled \$72.8 billion, which represents a 9.9% increase from 2012. Oil and gas accounted for 71% of Alberta's total commodity exports in 2013.

Over the past decade there has been a massive shift between these two commodities: whereas in 2005 gas and gas liquids exports still accounted for 60% of oil and gas exports, by 2013 that share had dropped to 13%. There are two reasons for this shift. One, gas production has been falling steadily for more than a decade, while crude oil

production has increased strongly, especially since 2008, because of the new oil sands projects that came on-stream. Second, because of the US shale gas revolution, gas prices have declined sharply since 2008 while crude oil prices have seen little change over that period.

Chart 1
Alberta's Oil and Gas Exports between 2003 and 2013



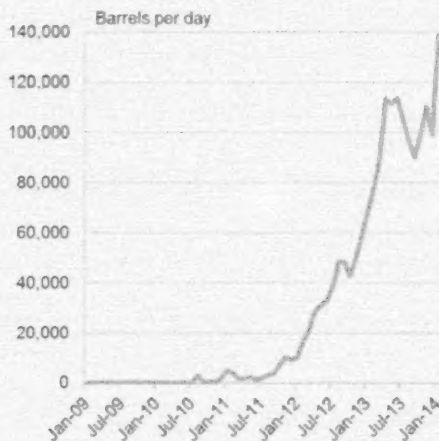
Sources: Statistics Canada and Alberta Innovation and Advanced Education

Crude Oil Exports

The value of crude oil exports increased by 9.2% between 2012 and 2013 to \$63.3 billion: volumes increased 7.6% and prices 1.5%. Between 2003 and 2013 the value of oil exports quadrupled (Chart 1). During the past decade export volumes rose by 69% from 1.2 million barrels per day (bpd) in 2003 to two million bpd by 2013 and export prices increased by 135%.

Rising oil sands production combined with pipeline capacity issues, especially in the US, have caused a massive increase in the volumes of crude oil that are shipped by rail (Chart 2).

Chart 2
Alberta Crude by Rail Export Volumes



Sources: Statistics Canada and Alberta Innovation and Advanced Education

Whereas as recently as 2011 only 0.3% of oil export volumes were shipped by rail, by 2013 that share had soared to 5.2% as an average of 98,000 bpd was shipped that year. In January 2014, nearly 140,000 bpd were shipped. Recent announcements about additional rail-loading facilities should lead to further increases in rail volumes over the next few years. According to a recent US Department of State report, total crude-by-rail loading capacity in Western Canada should rise to approximately 1.1 million bpd by the end of 2014.

Exports of Natural Gas and Gas Liquids

The value of gas and gas liquids exports increased by 14.5% between 2012 and 2013 to \$9.5 billion: volumes decreased by 7% but prices jumped 23%. Natural gas exports rose by 16.6% to \$8.4 billion as an 8.4% decline in export volumes was more than offset by a 27.3% price jump. Propane exports totaled \$1.1 billion in 2013, a 4.8% rise from the previous year as a result of a 7.3% increase in volumes.

Between 2003 and 2013 the value of gas and gas liquids exports fell by 60%. During the past decade natural gas export volumes decreased by 69% from 3,215 billion gigajoules in 2003 to 2,490 billion gigajoules by 2013 and export prices fell by one-half. Propane volumes tumbled 26% over the same period while propane prices rose by about 20%.

Export Markets for Alberta Oil and Gas

The US continues to account for more than 99% of oil exports and for 100% of gas exports. In 2013, the value of oil exports to non-US markets was about \$200 million, down from \$435 million in 2012. China remained the largest off-shore market at \$134 million, also down from \$435 million in 2012.

Monthly export information can be found at:

<http://economicdashboard.albertacanada.com/MerchandiseExport>